

# RACM600-L/OF Series / AC-DC Power Supply

## 600W / Universal Input 100V - 240VAC

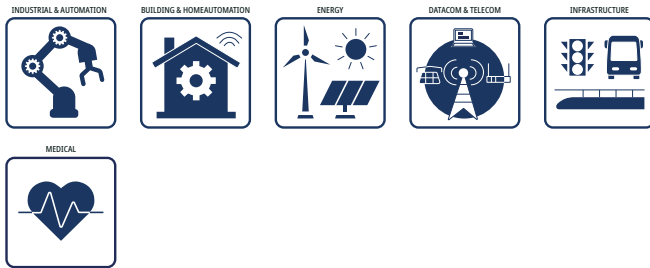
### FEATURES

- Up to 450 Watt convection cooled output
- Up to 800 Watt dynamic load supply
- 5VSB output (always on)
- Remote sensing, CTRL ON/OFF, PMBus™
- Redundant operation, active current sharing
- IEC60601 MOPP insulation system, BF ready
- 3 years warranty



Dimensions (HxWxD): 196.8 x 101.6 x 40.6mm (7.75 x 4 x 1.6 inch)  
1000g (2.2 lbs)

### APPLICATIONS



### SAFETY & EMC



### DESCRIPTION

RACM600-L/OF Series AC/DC power supply units are designed to support operation in natural convection where conduction cooling is not an option for up to 450W continuous and peak power of up to 600W or 800W. Safety approvals to Medical IEC 60601-1-2, to IT and to industrial IEC 62368 standards and operations with worldwide input voltage conditions from 80 to 275VAC in altitudes of up to 5.000m makes these chassis mount units ideal for global use in various automation processes. For enhanced reliability requirements of applications, redundant operation is supported with active current sharing. An additional 5V "always on" Stand by output powers housekeeping circuitry to control remote on/off and monitoring functions, which are available via the PMBus I<sup>2</sup>C interface. EN55032 class B coverage is given without any external components, which underlines the versatility of these power supplies.

### SELECTION GUIDE

| Part Number     | Input Voltage Range [VAC] | Output Voltage nom. [VDC] | Output Adjustability [VDC] | Output Current max. <sup>(1)</sup> [A] | Efficiency typ. <sup>(2)</sup> [%] | Peak Power max. <sup>(1)</sup> [W] |
|-----------------|---------------------------|---------------------------|----------------------------|----------------------------------------|------------------------------------|------------------------------------|
| RACM600-12SL/OF | 80-275                    | 12                        | 9.6-14.4                   | 66.67                                  | 92                                 | 800                                |
| RACM600-24SL/OF | 80-275                    | 24                        | 19.2-28.8                  | 25                                     | 93                                 | 600                                |
| RACM600-48SL/OF | 80-275                    | 48                        | 38.4-56                    | 16.67                                  | 93                                 | 800                                |

Note1: Refer to „Peak Load Capability“

Note2: Efficiency is tested at nominal input (230VAC) and full load at +25°C ambient

# RACM600-L/OF Series / AC-DC Power Supply

## 600W / Universal Input 100V - 240VAC

**BASIC CHARACTERISTICS** (measured @  $T_{AMB} = 25^{\circ}\text{C}$ , nom.  $V_{IN}$ , full load and after warm-up unless otherwise stated)

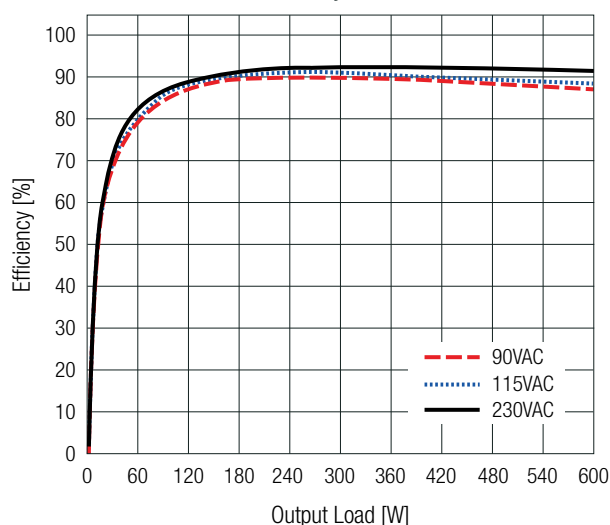
| Parameter                          | Condition                                                | Min.   | Typ. | Max.   |
|------------------------------------|----------------------------------------------------------|--------|------|--------|
| Nominal Input Voltage              | 50/60Hz                                                  | 100VAC |      | 240VAC |
| Operating Range <sup>(3, 4)</sup>  | 47-63Hz                                                  | 80VAC  |      | 275VAC |
|                                    | DC                                                       | 120VDC |      | 300VDC |
| Input Current                      | RACM600-24SL/OF                                          | 80VAC  |      | 9A     |
|                                    |                                                          | 120VDC |      | 5.7A   |
|                                    | RACM600-12SL/OF;<br>RACM600-48SL/OF                      | 80VAC  |      | 11.4A  |
|                                    |                                                          | 120VDC |      | 7.6A   |
| Inrush Current                     | cold start, $+25^{\circ}\text{C}$                        |        |      | 20A    |
| Input Frequency Range              | AC input                                                 | 47Hz   |      | 63Hz   |
| Minimum Load                       |                                                          | 0%     |      |        |
| Power Factor                       | EN61000-3-2, Class A compliant                           |        | 0.9  |        |
| Start-up time                      | MAIN ON                                                  |        |      | 2.5s   |
|                                    | CRTL ON                                                  |        |      | 150ms  |
| Rise time                          |                                                          |        |      | 150ms  |
| Hold-up time                       |                                                          |        | 20ms |        |
| Periodic and Random Deviation PARD | 20MHz BW, 10 $\mu\text{F}$ Tan. and 1 $\mu\text{F}$ MLCC |        |      | 1%p-p  |

Note3: The products were submitted for safety files at AC-Input operation.

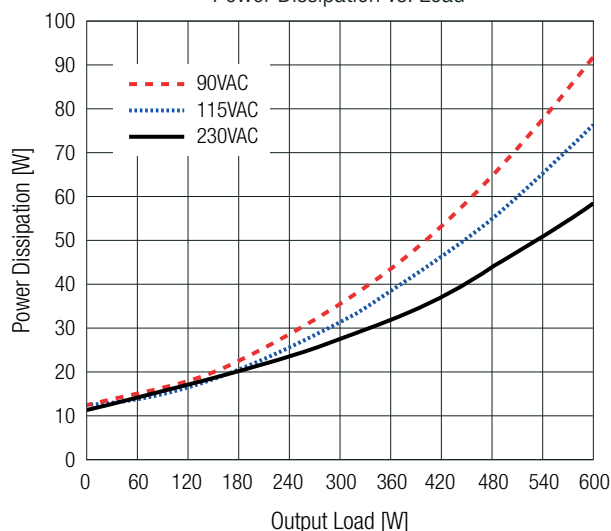
Note4: Refer to „Rating Graphs of continuous operation“

### RACM600-12SL/OF

Efficiency vs. Load

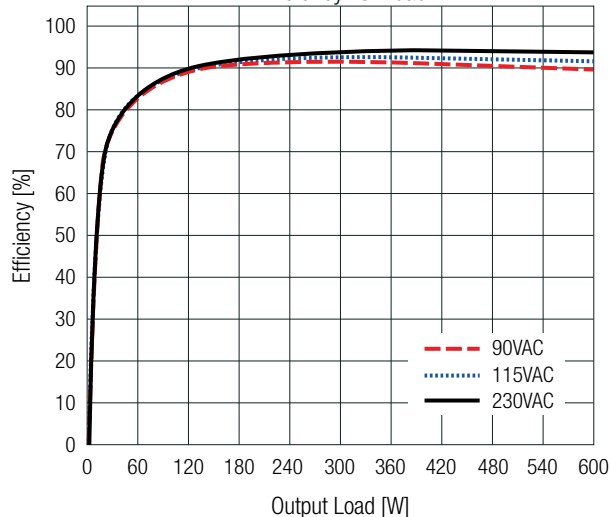


Power Dissipation vs. Load

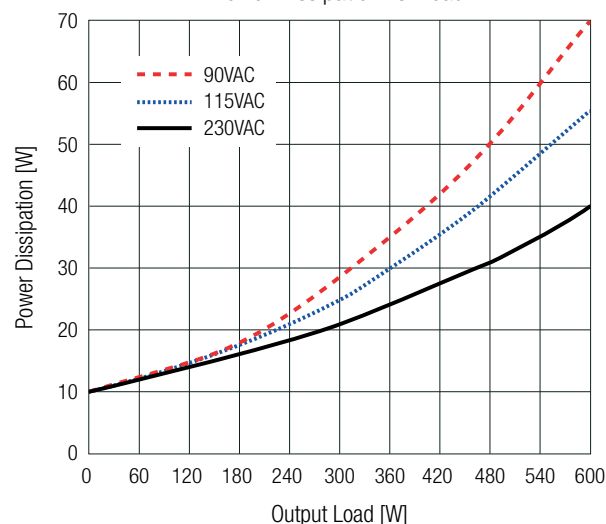


### RACM600-24SL/OF

Efficiency vs. Load



Power Dissipation vs. Load

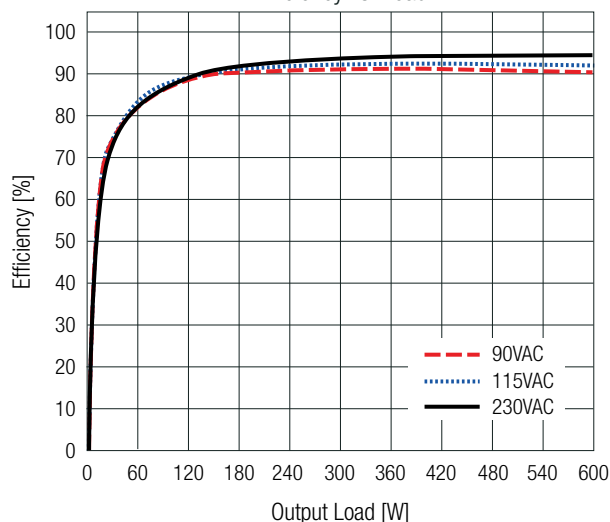


**RACM600-L/OF Series / AC-DC Power Supply**

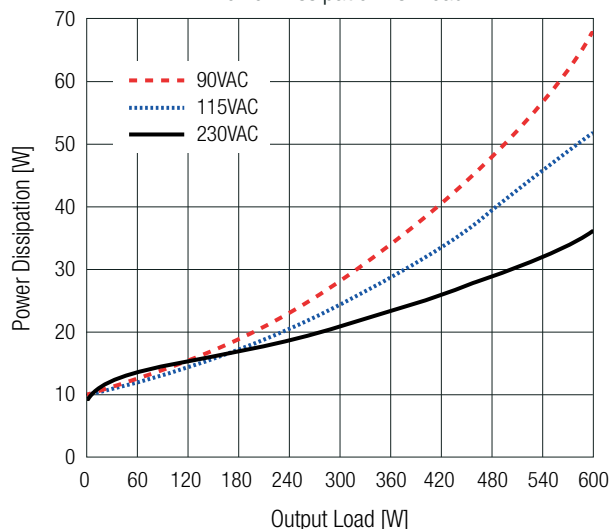
600W / Universal Input 100V - 240VAC

BASIC CHARACTERISTICS (measured @  $T_{AMB} = 25^{\circ}\text{C}$ , nom.  $V_{IN}$ , full load and after warm-up unless otherwise stated)**RACM600-48SL/OF**

Efficiency vs. Load



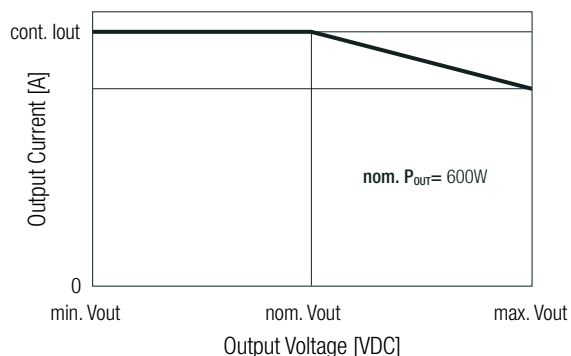
Power Dissipation vs. Load

ADDITIONAL FEATURES (measured @  $T_{AMB} = 25^{\circ}\text{C}$ , nom.  $V_{IN}$ , full load and after warm-up unless otherwise stated)

| Parameter                                          | Condition                                                        |                 | Min.                                              | Typ. | Max.    |
|----------------------------------------------------|------------------------------------------------------------------|-----------------|---------------------------------------------------|------|---------|
| ON/OFF CTRL<br>(logic can be switched with PMBus™) | CON3                                                             | MAIN output ON  | on                                                |      |         |
|                                                    |                                                                  | MAIN output OFF | CTRL (pin10) shorted to 5VSB_RTN (pin3,4,7)       |      |         |
| Output Voltage Adjustability <sup>(5)</sup>        | on-board poti, refer to<br>„Output Current vs. Output Voltage“   | RACM600-12SL/OF | 9.6VDC                                            |      | 14.4VDC |
|                                                    |                                                                  | RACM600-24SL/OF | 19.2VDC                                           |      | 28.8VDC |
|                                                    |                                                                  | RACM600-48SL/OF | 38.4VDC                                           |      | 56VDC   |
| Remote Sense <sup>(6)</sup>                        | total voltage drop compensation for +Sense and -Sense connection |                 |                                                   |      | 200mV   |
| Power OK Led                                       | LED = green                                                      |                 | turn ON as soon as PSU_GOOD Signal is set to high |      |         |

Note5: Make sure that the maximum rated output power will not be exceeded when trimming up as well.

Note6: Do not short or reversely connect +Sense to -Sense, this can cause damage to the supply.

**Output Current vs. Output Voltage**

| Model           | min. Vout | nom. Vout | max Vout | max. cont. Iout |
|-----------------|-----------|-----------|----------|-----------------|
| RACM600-12SL/OF | 9.6VDC    | 12VDC     | 14.4VDC  | 50A             |
| RACM600-24SL/OF | 19.2VDC   | 24VDC     | 28.8VDC  | 25A             |
| RACM600-48SL/OF | 38.4VDC   | 48VDC     | 56VDC    | 12.5A           |

5VSB OUTPUT <sup>(7)</sup> (measured @  $T_{AMB} = 25^{\circ}\text{C}$ , nom.  $V_{IN}$ , full load and after warm-up unless otherwise stated)

| Parameter                         | Condition          | Min. | Typ. | Max.                  |
|-----------------------------------|--------------------|------|------|-----------------------|
| Nominal Output Voltage            |                    |      |      | 5VDC                  |
| Max. Output Current               |                    |      |      | 500mA                 |
| Max. Output Power                 |                    |      |      | 2.5W                  |
| Max. Capacitive Load              |                    |      |      | 1000μF                |
| Over Voltage Protection (OVP)     |                    |      |      | 5.5-6VDC, latch off   |
| Over Current Protection (OCP)     | of rated $I_{OUT}$ |      |      | 1-1.3A, auto recovery |
| Short Circuit Protection (SCP)    |                    |      |      | auto recovery         |
| Over Temperature Protection (OTP) |                    |      |      | auto recovery         |

Note7: There is no galvanic isolation between AUX GND and Main Output GND. Regulations for 5VSB Output are stated under „Regulations“

# RACM600-L/OF Series / AC-DC Power Supply

## 600W / Universal Input 100V - 240VAC

### REGULATIONS (measured @ $T_{AMB} = 25^{\circ}\text{C}$ , nom. $V_{IN}$ , full load and after warm-up unless otherwise stated)

| Parameter                              | Condition                                                                                              | Value             |
|----------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------|
| Output Accuracy (MAIN and 5VSB output) |                                                                                                        | $\pm 2.25\%$ max. |
| Line Regulation (MAIN and 5VSB output) | low line to high line, full load                                                                       | $\pm 0.25\%$ typ. |
| Load Regulation (MAIN and 5VSB output) | 0% to 100% load                                                                                        | 1.0% typ.         |
| Dynamic Load Regulation                | 50% step from 5% load (1A/ $\mu\text{s}$ ), tested with 10 $\mu\text{F}$ Tan. and 1 $\mu\text{F}$ MLCC | 5.0% max.         |

### PROTECTIONS (measured @ $T_{AMB} = 25^{\circ}\text{C}$ , nom. $V_{IN}$ , full load and after warm-up unless otherwise stated)

| Parameter                                           | Type                            |                                  | Value                                    |
|-----------------------------------------------------|---------------------------------|----------------------------------|------------------------------------------|
| Internal Input Fuse                                 | DC input compliant, dual-fusing | RACM600-24SL/OF                  | 2x T10A                                  |
|                                                     |                                 | RACM600-12SL/OF; RACM600-48SL/OF | 2x F12.5A                                |
| Short Circuit Protection (SCP)                      |                                 |                                  | hiccup mode, auto recovery               |
| Over Voltage Protection (OVP)                       |                                 | RACM600-12SL/OF                  | 15VDC - 17.5VDC, latch off               |
|                                                     |                                 | RACM600-24SL/OF                  | 30VDC - 35VDC, latch off                 |
|                                                     |                                 | RACM600-48SL/OF                  | 58.5VDC - 63VDC, latch off               |
| Over Voltage Category (OVC)                         |                                 |                                  | OVCII                                    |
| Over Current Protection (OCP)                       |                                 | RACM600-24SL/OF                  | 108-140%, auto recovery                  |
|                                                     |                                 | RACM600-12SL/OF; RACM600-48SL/OF | 105-120%, auto recovery                  |
| Over Temperature Protection (OTP)                   |                                 |                                  | auto recovery                            |
| Isolation Voltage (safety certified) <sup>(8)</sup> | 1 minute                        | I/P to O/P (reinforced)          | 4kVAC (2MOPP)                            |
|                                                     |                                 | I/P and O/P to Case (basic)      | 1.5kVAC (1MOPP)                          |
| Insulation Grade                                    |                                 |                                  | reinforced                               |
| Leakage Current Input to Earth GND                  | low line= 132VAC , 63Hz         | Normal condition                 | 150 $\mu\text{A}$ max.                   |
|                                                     |                                 | Single Fault                     | 250 $\mu\text{A}$ max.                   |
|                                                     | high line= 264VAC , 60Hz        | Normal condition                 | 300 $\mu\text{A}$ max.                   |
|                                                     |                                 | Single Fault                     | 500 $\mu\text{A}$ max.                   |
| Leakage Current Output to Earth GND                 | 264VAC , 63Hz                   | Normal condition                 | 60 $\mu\text{A}$ max.                    |
|                                                     |                                 | Single Fault (neutral open)      | 80 $\mu\text{A}$ max.                    |
|                                                     |                                 | Single Fault (ground open)       | 150 $\mu\text{A}$ max.                   |
|                                                     |                                 | AC Back-drive Fault              | 550 $\mu\text{A}$ max.                   |
| Class of Equipment                                  |                                 |                                  | Class I with PE connection               |
| Medical Device Classification                       |                                 | according to IEC 60601-1         | designed to support type BF applied part |

Note8: For repeat Hi-Pot testing, reduce the time and/or the test voltage

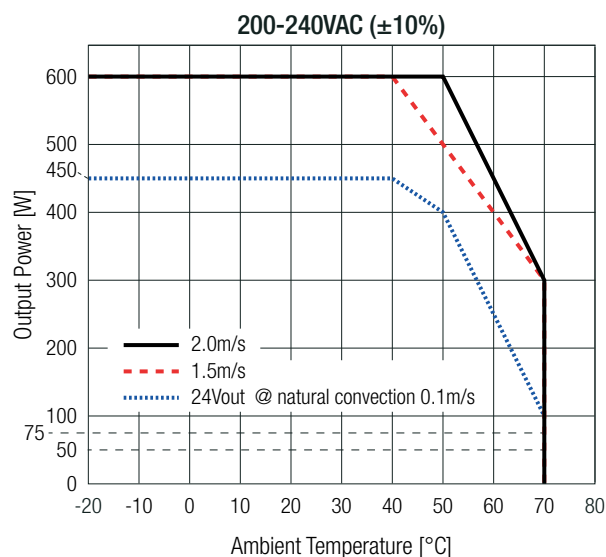
### ENVIRONMENTAL (measured @ $T_{AMB} = 25^{\circ}\text{C}$ , nom. $V_{IN}$ , full load and after warm-up unless otherwise stated)

| Parameter                           | Condition                                                                                  |                        | Value                                          |
|-------------------------------------|--------------------------------------------------------------------------------------------|------------------------|------------------------------------------------|
| Operating Ambient Temperature Range | refer to „Rating Graphs of continuous operation“                                           | $T_{BASE}$ temperature | $-20^{\circ}\text{C}$ to $+70^{\circ}\text{C}$ |
| Operating Altitude <sup>(9)</sup>   | according to 62368-1                                                                       |                        | 5000m                                          |
|                                     | according to 60601-1                                                                       |                        | 3000m                                          |
| Operating Humidity                  | non-condensing                                                                             |                        | 95% RH max.                                    |
| Pollution Degree                    |                                                                                            |                        | PD2                                            |
| Vibration (non-operating)           | 2.09Gr.m.s., 5Hz to 500Hz, 20 minutes per side (3 planes)                                  |                        | according to IEC 60068-2-6                     |
| Shock (non-operating)               | 50G, 11ms, 3 shocks for each direction                                                     |                        | according to IEC 60068-2-27                    |
| MTBF                                | according to Telcordia SR-332, Issue 3, $25^{\circ}\text{C}$ ambient, 90% confidence level |                        | $500 \times 10^3$ hours                        |
| Design Lifetime (capacitor)         | nom. $V_{IN}$ , 80% load, $45^{\circ}\text{C}$ ambient                                     |                        | $87.6 \times 10^3$ hours                       |

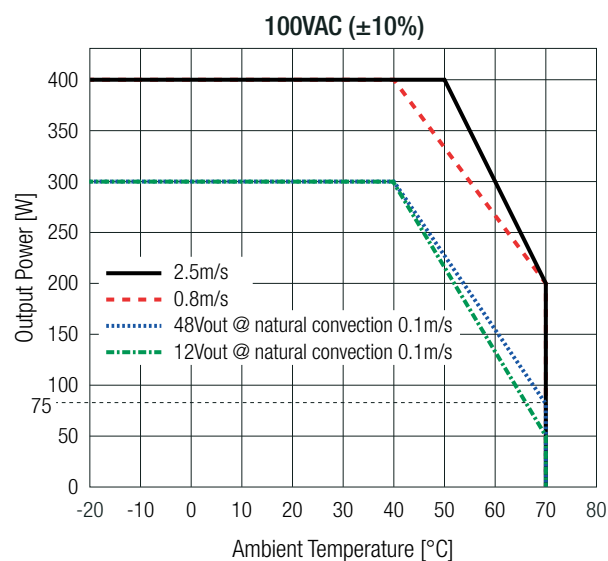
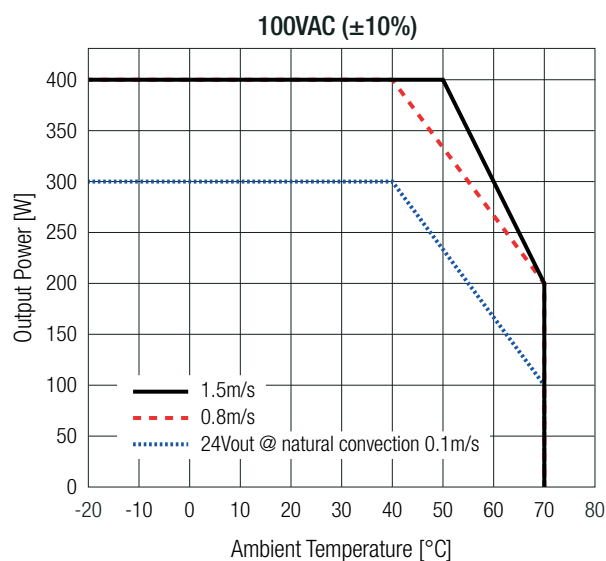
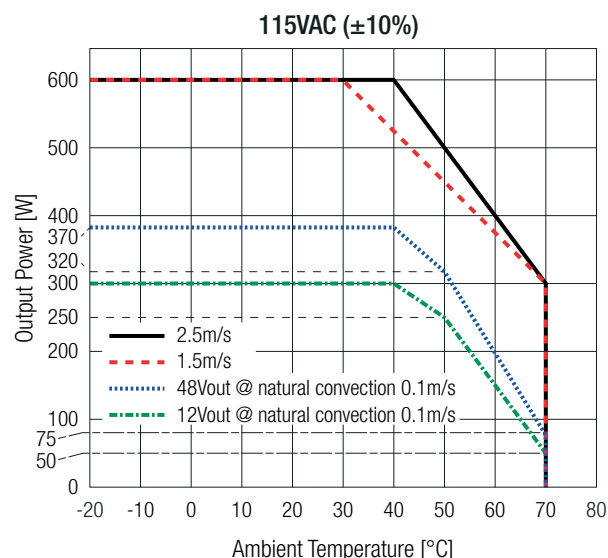
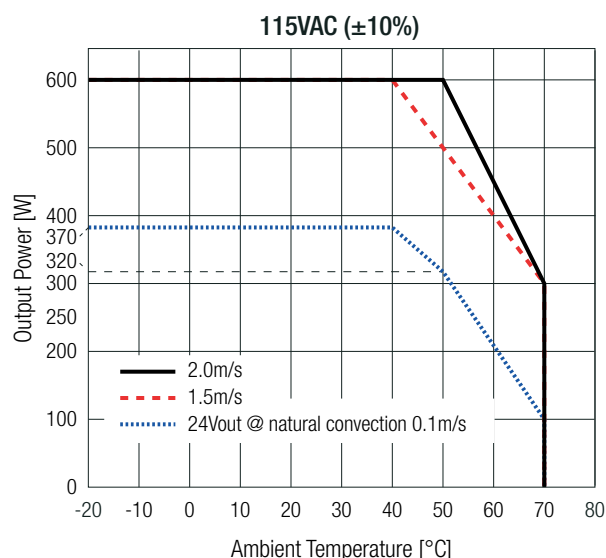
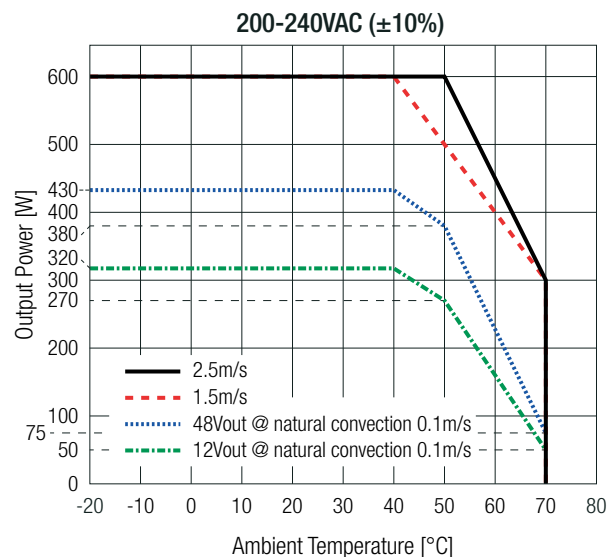
Note9: Recognized by safety agency for safe operation up to 5000m. High altitude operation may impact the performance and lifetime  
Ambient temperature decreases by  $1^{\circ}\text{C}$  per 305m altitude increase

### RATING GRAPHS OF CONTINUOUS OPERATION

RACM600-24SL/OF (600W max. Peak Power)



RACM600-12SL/OF & RACM600-48SL/OF (800W max. Peak Power)



Output power derating for Line-input of less than 90VAC. De-rate linearly from 100% at 90VAC to 80% at 80VAC to given thermal ratings

# RACM600-L/OF Series / AC-DC Power Supply

## 600W / Universal Input 100V - 240VAC

### PEAK LOAD CAPABILITY

#### Guideline for sporadically occurring peak loads (RACM600-12(48)SL/OF):

800 Watt max. @ 40°C ambient with a maximum duty cycle of:

0.5% .. for still air convection

4% ... at 1.5m/s provided system airflow

#### Calculation Guideline for recurrent dynamic load cycles:

| Peak Load calculation for recurrent dynamic loading |       | Peak Load calculation for still air convection   |                 |                 | Peak Load Capability with 1.5m/s airflow |
|-----------------------------------------------------|-------|--------------------------------------------------|-----------------|-----------------|------------------------------------------|
| Parameters                                          | Units | RACM600-12SL/OF                                  | RACM600-48SL/OF | RACM600-24SL/OF | RACM600-12(48)SL/OF                      |
| $P_{nom}$ = rated output power                      | [W]   | refer to „Rating Graphs of continuous operation“ |                 |                 |                                          |
| $P_p$ = peak output power                           | [W]   | ≤800                                             | ≤800            | ≤600            | ≤800                                     |
| $P_r$ = recovery output power                       | [W]   | use calculation below                            |                 |                 |                                          |
| $t_1$ = peak time set                               | [s]   | ≤5s                                              | ≤5s             | ≤5s             | ≤10s                                     |
| $t_2$ = recovery time                               | [s]   | min. 10 x $t_1$                                  | min. 8 x $t_1$  | min. 8 x $t_1$  | min. 6 x $t_1$                           |
| $k$ = heat dissipation factor                       | [ ]   | 2                                                | 2               | 2               | 1.2                                      |

$$\text{Calculation: } P_r = \frac{P_{nom} \times (t_1 + t_2) - (P_p \times t_1)}{t_2 \times k}$$

#### Practical Example (RACM600-48SL/OF for still air convection):

Take the RACM600-48SL/OF at 230VAC input Voltage and full load at  $T_{AMB} = 50^\circ\text{C}$ , with still air convection.

$$P_p = 720\text{W}$$

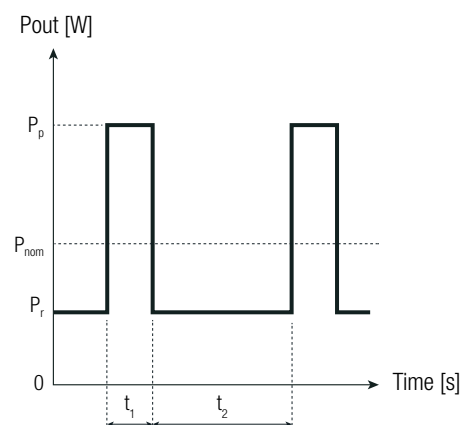
$$P_{nom} = 380\text{W}$$

$$t_1 = 4\text{s}$$

$$t_2 = 32\text{s}$$

$$k = 2$$

$$P_r = \frac{380 \times (4 + 32) - (720 \times 4)}{32 \times 2} = 169\text{W}$$



### SAFETY & CERTIFICATIONS

| Certificate Type (Safety) (12Vout pending)                                                                       | Report Number            | Standard                                                                             |
|------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------|
| Audio/video, information and communication technology equipment - Safety requirements (CB)                       | T223-0662-21             | IEC62368-1, 2nd Edition 2014                                                         |
| Audio/video, information and communication technology equipment - Safety requirements (LVD)                      |                          | EN62368-1:2014 + A11:2017                                                            |
| Audio/Video, information and communication technology equipment - Part1: Safety requirements                     | E224736-A6026-UL         | UL62368-1:2014<br>CAN/CSA-C22.2 No. 62368-1:2014                                     |
| Medical Electric Equipment, General Requirements for Safety and Essential Performance                            | E314885-D1009-1/A0/C0-UL | ANSI/AAMI ES60601-1:2005A2:2010/(R)2012<br>CAN/CSA-C22.2 No. 60601-1:14, 3rd Edition |
| Medical electrical equipment Part 1: General requirements for basic safety and essential performance (CB Scheme) | T223-0661-21             | IEC60601-1:2005, 3rd Edition + AM1:2012                                              |
| Medical electrical equipment Part 1: General requirements for basic safety and essential performance             |                          | EN60601-1:2006 + A1:2013                                                             |
| RoHS2                                                                                                            |                          | RoHS-2011/65/EU + AM-2015/863                                                        |

| EMC Compliance according to EN 6060-1-2 (12Vout & 48Vout pending)                                                                                                                   | Condition                                                                                                                                  | Standard / Criterion                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Medical electrical equipment Part 1-2: General requirements for basic safety and essential performance – Collateral Standard: Electromagnetic disturbances – Requirements and tests |                                                                                                                                            | EN60601-1-2:2015                      |
| ESD Electrostatic Discharge Immunity Test                                                                                                                                           | Contact: ±8kV                                                                                                                              | IEC61000-4-2:2008<br>EN61000-4-2:2009 |
| Radiated, Radio-Frequency, Electromagnetic Field Immunity Test                                                                                                                      | 10V/m, 12V/m (80-2700MHz); 27V/m (385MHz); 28V/m (450, 810, 870, 930, 1720, 1845, 1970, 2450MHz); 9V/m (710, 745, 780, 5240, 500, 5785MHz) | IEC/EN61000-4-3:2006+A2:2010          |

# RACM600-L/OF Series / AC-DC Power Supply

## 600W / Universal Input 100V - 240VAC

### SAFETY & CERTIFICATIONS

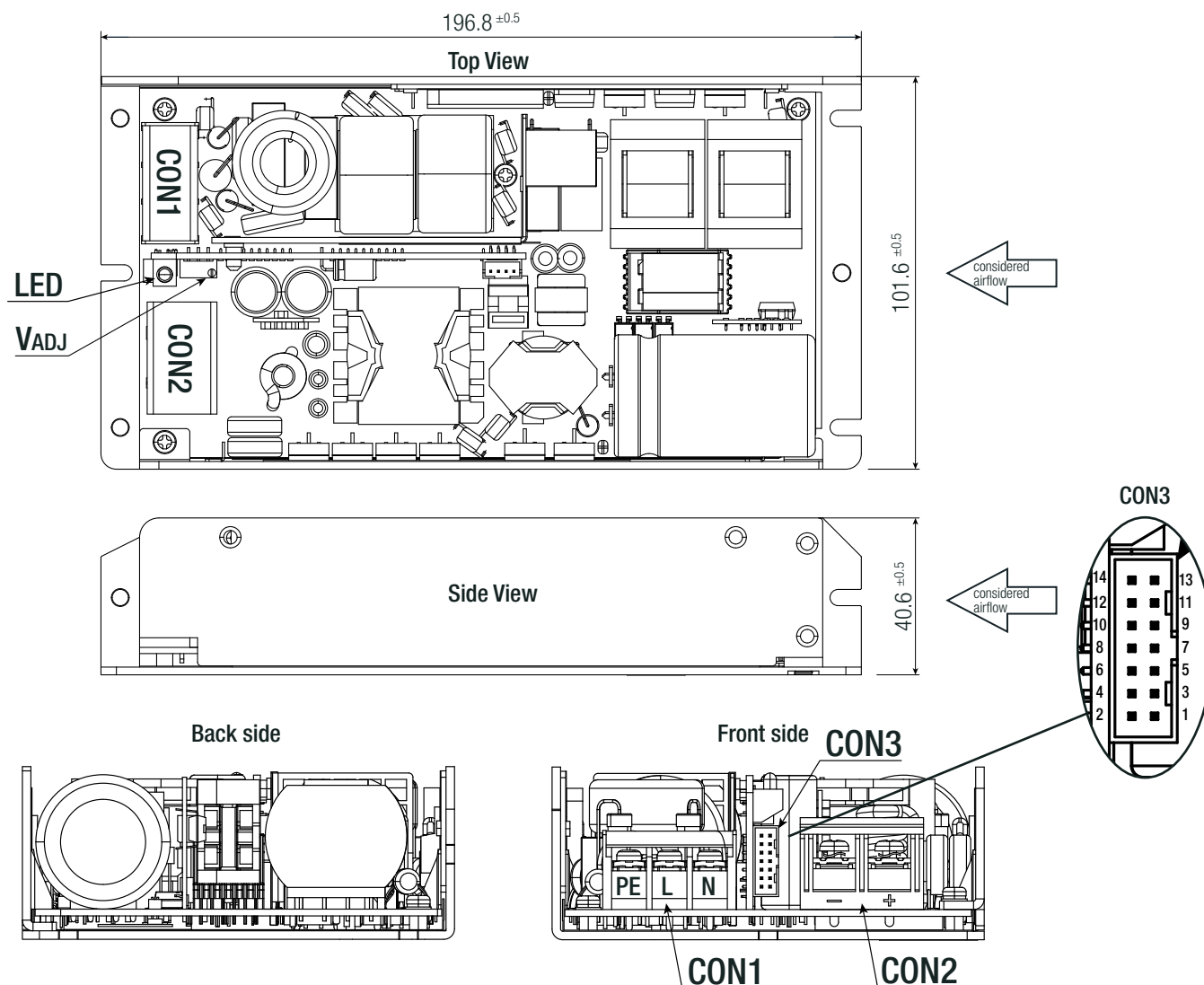
| EMC Compliance according to EN 6060-1-2 (12Vout & 48Vout pending)             | Condition                                                                                                                                                                            | Standard / Criterion                                                                         |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Fast Transient and Burst Immunity                                             | AC Power Port: L, N, PE $\pm 2k$                                                                                                                                                     | IEC/EN61000-4-4:2012                                                                         |
| Surge Immunity                                                                | AC Power Port: L-N $\pm 0.5, 1kV$ ;<br>L-PE, N-PE $\pm 0.5, 1, 2kV$                                                                                                                  | IEC/EN61000-4-5:2014+A1:2017                                                                 |
| Immunity to Conducted Disturbances, Induced by Radio-Frequency Fields         | AC Power Port 3, 10Vrms (0.15-80MHz);<br>6, 10Vrms (ISM bands)                                                                                                                       | IEC61000-4-6:2013<br>EN61000-4-6:2014                                                        |
| Power Magnetic Field Immunity                                                 | 30A/m                                                                                                                                                                                | IEC61000-4-8:2009<br>EN61000-4-8:2010                                                        |
| Voltage Dips                                                                  | 100V/50Hz, 240VAC/50Hz:<br>100% (0.5P, 1P); 60% (5P); 30% (0.5P); 30% (25P)                                                                                                          | IEC/EN61000-4-11:2004+A1:2017                                                                |
| Voltage Interruptions                                                         | 100V/50Hz, 240VAC/50Hz:<br>100% (25P, 250P)                                                                                                                                          | IEC/EN61000-4-11:2004+A1:2017                                                                |
| Limits of Harmonic Current Emissions                                          |                                                                                                                                                                                      | EN IEC 61000-3-2:2019                                                                        |
| Voltage Fluctuations and Flicker in Public Low-Voltage Systems                |                                                                                                                                                                                      | EN61000-3-3:2013+A1:2019                                                                     |
| EMC Compliance according to EN 55032/35 (12Vout & 48Vout pending)             | Condition                                                                                                                                                                            | Standard / Criterion                                                                         |
| Electromagnetic compatibility of multimedia equipment – Emission Requirements |                                                                                                                                                                                      | EN55032:2015+A11:2020, Class B                                                               |
| Electromagnetic compatibility of multimedia equipment – Immunity requirements |                                                                                                                                                                                      | EN55035:2017+A11:2020, Class B                                                               |
| ESD Electrostatic Discharge Immunity Test                                     | Contact: $\pm 2, 4kV$                                                                                                                                                                | IEC61000-4-2:2008<br>EN61000-4-2:2009                                                        |
| Radiated, radio-frequency, electromagnetic field immunity test                | 3, 12V/m (80-1000 MHz);<br>3, 12V/m (1800, 260, 3500, 5000MHz)                                                                                                                       | IEC/EN61000-4-3:2006+A2:2010,<br>Criteria A                                                  |
| Fast Transient and Burst Immunity                                             | AC Power Port: L, N, PE $\pm 1, 2kV$<br>DC Power Port: Positive, Negative, Ground: $\pm 0.5, 2kV$                                                                                    | IEC/EN61000-4-4:2012, Criteria A                                                             |
| Surge Immunity                                                                | AC Power Port: L-N $\pm 1kV$ ;<br>L-PE, N-PE $\pm 2kV$<br>DC Power Port:<br>Positive-Negative $\pm 0.5, 1kV$ ;<br>Positive-Ground $\pm 0.5, 2kV$ ;<br>Negative-Ground $\pm 0.5, 2kV$ | IEC/EN61000-4-5:2014+A1:2017,<br>Criteria A                                                  |
| Immunity to conducted disturbances, induced by radio-frequency fields         | AC Power Port & DC Power Port:<br>10 Vrms (0.15-80MHz);<br>3Vrms (0.15-10MHz);<br>3-1Vrms (10-30MHz);<br>1Vrms (30-80MHz)                                                            | IEC61000-4-6:2013, Criteria A<br>EN61000-4-6:2014, Criteria A                                |
| Power Magnetic Field Immunity                                                 | 1, 10A/m                                                                                                                                                                             | IEC61000-4-8:2009, Criteria A<br>EN61000-4-8:2010, Criteria A                                |
| Voltage Dips                                                                  | 100V/50Hz, 240VAC/50Hz:<br>100% (0.5P, 1P); 30% (0.5P); 30% (25P)<br>100V/50Hz: 60% (5P)                                                                                             | IEC/EN61000-4-11:2004+A1:2017,<br>Criteria A<br>IEC/EN61000-4-11:2004+A1:2017,<br>Criteria B |
| Voltage Interruptions                                                         | 100V/50Hz, 240VAC/50Hz:<br>100% (25P, 250P)                                                                                                                                          | IEC/EN61000-4-11:2004+A1:2017,<br>Criteria B                                                 |
| Limits of Harmonic Current Emissions                                          |                                                                                                                                                                                      | EN IEC 61000-3-2:2019                                                                        |
| Limits of Voltage Fluctuations & Flicker                                      |                                                                                                                                                                                      | EN61000-3-3:2013+A1:2019                                                                     |

### DIMENSION & PHYSICAL CHARACTERISTICS

| Parameter         | Type               | Value                                         |
|-------------------|--------------------|-----------------------------------------------|
| Material          | chassis            | aluminum                                      |
| Dimension (HxWxD) |                    | 196.8 x 101.6 x 40.6mm<br>7.75 x 4 x 1.6 inch |
| Weight            | with mounting clip | 1000g<br>2.2 lbs                              |

### DIMENSION & PHYSICAL CHARACTERISTICS

Dimension Drawing (mm)



#### Signal CON3

(Molex PCB Header 87833-1420)

| #  | Function      | #  | Function        |
|----|---------------|----|-----------------|
| 14 | -Sense        | 13 | +Sense          |
| 12 | address       | 11 | Current_share_V |
| 10 | Remote ON/OFF | 9  | PSU_GOOD        |
| 8  | +5VSB         | 7  | 5VSB_RTN        |
| 6  | SDA           | 5  | SCL             |
| 4  | 5VSB_RTN      | 3  | 5VSB_RTN        |
| 2  | +5VSB         | 1  | +5VSB           |

#### Compatible Connector CON3

##### Housing

Molex 51110 Series or equivalent

##### Crimp Terminal

Molex 50394 Series or equivalent

#### Input CON1 <sup>(9)</sup>

(M3.5 screws)

Dinkle: DT-4C-B01W-03-GN)

| Function    | AWG   |
|-------------|-------|
| PE          | 12-18 |
| L (line)    | 12-18 |
| N (neutral) | 12-18 |

wire stripping length: 7-8mm  
recommended tightening torque : 1.3Nm

#### Output CON2 for 24Vout & 48Vout <sup>(9)</sup>

(M4 screws)

Dinkle: DT-7C-B01W-0137-02

| Function | AWG  |
|----------|------|
| -VOUT    | 8-12 |
| +VOUT    | 8-12 |

wire stripping length: 10-11mm  
recommended tightening torque 1.5Nm

#### Output CON2 for 12Vout <sup>(9)</sup>

(M5 screws)

Dinkle: 0166-80-S1531802C

| Function | AWG |
|----------|-----|
| -VOUT    | 4-6 |
| +VOUT    | 4-6 |

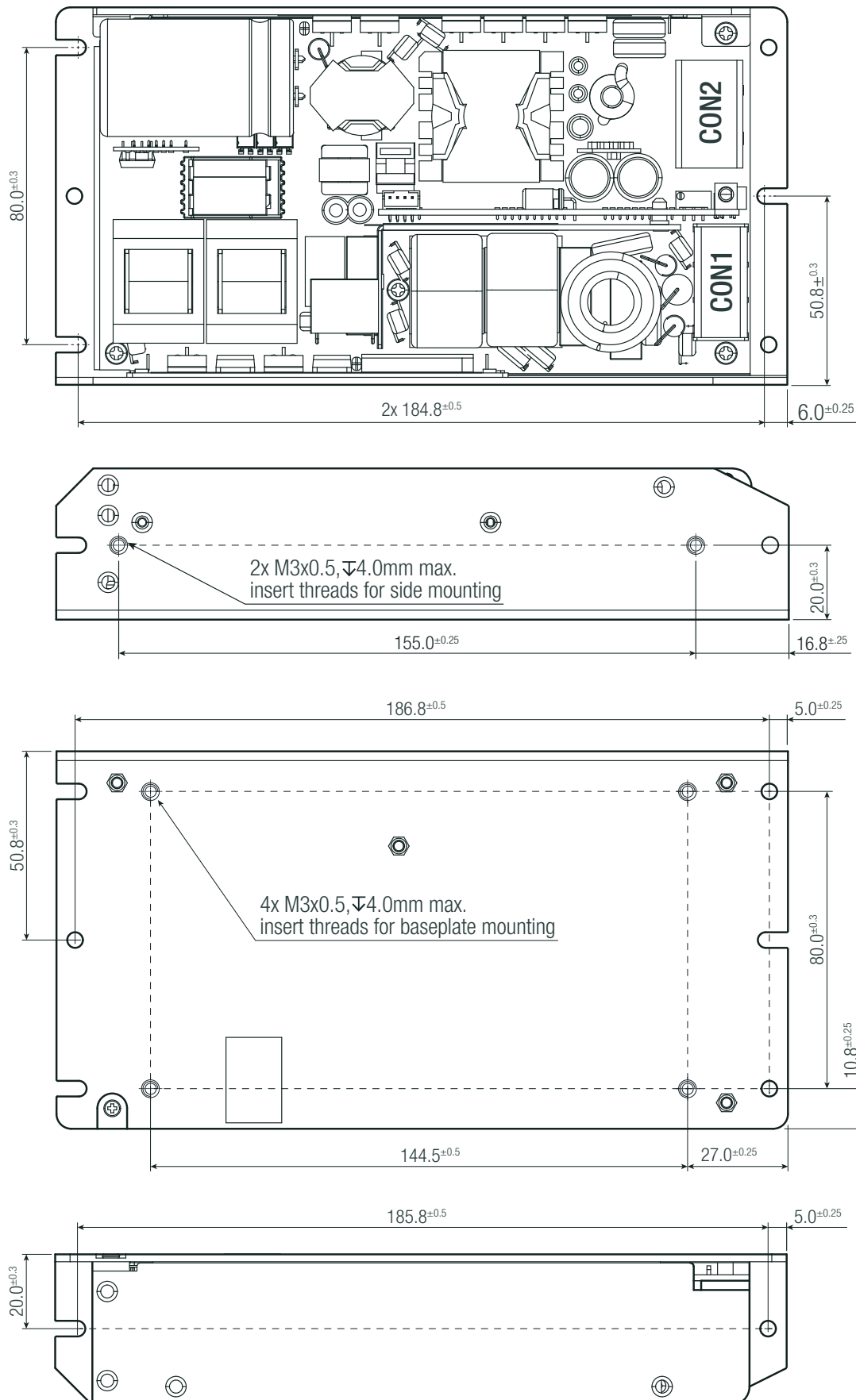
wire stripping length: 14-15mm  
recommended tightening torque 2.4Nm

Note9: Use flexible cable with below lugs:



### INSTALLATION & APPLICATION

#### Mounting Dimensions



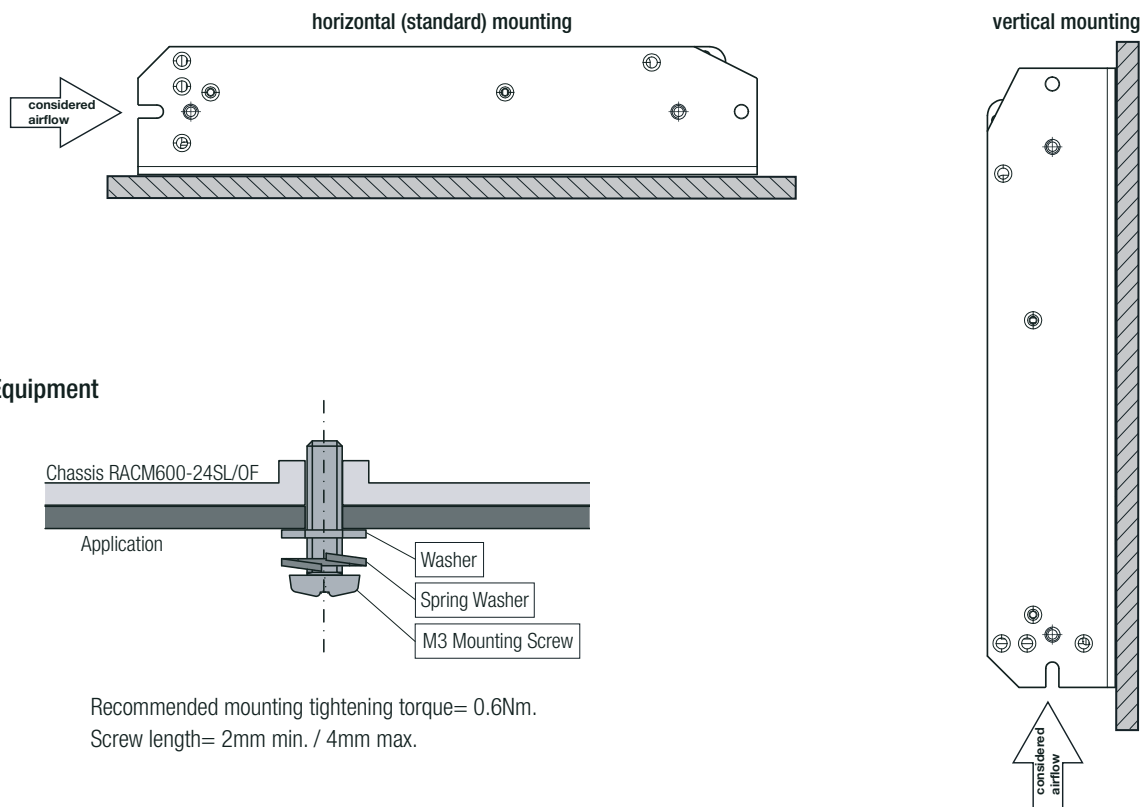
# RACM600-L/OF Series / AC-DC Power Supply

## 600W / Universal Input 100V - 240VAC

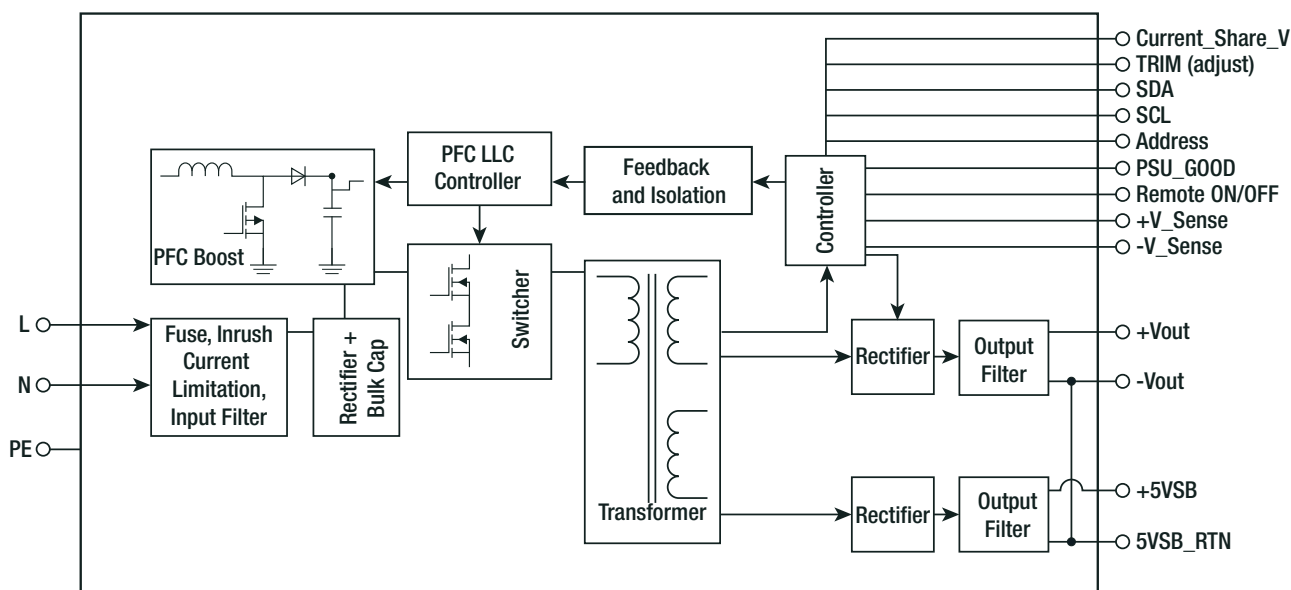
### INSTALLATION & APPLICATION

#### Mounting Orientations

With forced air cooling, mounting orientation has no impact on output power. Upside down mounting is not recommended. Forced air conditions as specified are valid for indicated airflow direction only (back side). The PSU should be placed on a metal surface. It should not be placed on isolating and low thermal conductive surfaces. Take care that no objects can fall into the PSU.



### BLOCK DIAGRAM



# RACM600-L/OF Series / AC-DC Power Supply

## 600W / Universal Input 100V - 240VAC

**PACKAGING INFORMATION**

| Parameter                   | Type           | Value                   |
|-----------------------------|----------------|-------------------------|
| Packaging Dimension (LxWxH) | cardboard box  | 400.0 x 318.0 x 150.0mm |
| Packaging Quantity          |                | 7pcs                    |
| Storage Temperature Range   |                | -40°C to +85°C          |
| Storage Humidity            | non-condensing | 95% RH max.             |

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